



Multi level governance framework for sustainable urban mobility

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EUROPEAN TRANSPORT REGULATION OBSERVER

Sustainable Urban Mobility: a challenge in governance

Topics discussed at the 4th Florence Urban Forum included to what extent and what level sustainable urban public transport should become a matter of regulation. The background of these questions were of course the European Commission's 2009 Action Plan on Urban Mobility ([COM\(2009\)490](#)) as well as the new Urban Mobility Package announced by the end of the year 2013.

The interest of the Commission in promoting sustainable urban mobility derives from two main concerns. On the one hand, it comes from the fact that the European competitiveness strongly depends upon the competitiveness of its cities, which contribute over 70% to Europe's overall GDP. On the other hand and related to this, it derives from the fact that cities disproportionately contribute to Europe's greenhouse gas emissions and general pollution. As a matter of fact, in the context of urban mobility, the idea of sustainability extends much further than the environmental sphere; it also refers to demand response (economic sustainability) and land use and urban planning (social responsibility). Therefore, in the field of urban transport, sustainability is quite logically a central preoccupation all over Europe, where different attempts are made to find an effective answer focussing on (a) urban mobility planning, (b) road charging, and (c) emissions reductions.

FSR TRANSPORT

The Florence School of Regulation (FSR) is a project within the European University Institute (EUI) focusing on regulatory topics. It works closely with the European Commission, and is a growing point of reference for regulatory theory and practice. It covers three areas: Communications and Media, Energy (Electricity and Gas), and Transport.

The FSR-Transport Area's main activities are the European Transport Regulation Forums, which address policy and regulatory topics in different transport sectors (Rail, Air, Urban, Maritime, Intermodal transport and Postal and delivery services). They bring relevant stakeholders together to analyse and reflect upon the latest developments and important regulatory issues in the European transport sector. These Forums inspire the comments gathered in this European Transport Regulation Observer

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Despite the importance of a decisive European action to promote sustainable urban transport, the Commission has actually little power to regulate cities. It rather has indirect tools at its disposal, either via the nation-states (see next paragraph) or via the so-called soft-law. Indeed, urban mobility can, at this point, only be incentivized by the decisions taken at the supra-national level. For example, in its announced Urban Mobility Package, the Commission will request the establishment of so-called Sustainable Urban Mobility Plans (SUMP), which will serve as a comprehensive planning tool for cities in the areas of land use, road charging and emissions reductions, among others. But such SUMP will not be declared mandatory, owing to the resistance of the nation-states. Consequently, the Commission will put incentive measures (ie financing) at the disposal of those cities that will have successfully produced SUMP, but it will still lack the enforcement power against those who will not comply with the plan. At the end of the day, this will jeopardise once more the possibility to get to a harmonized European approach to urban mobility.

Technically, the Commission could choose to impose mandatory measures on the nation-states, which in turn will have to mandate and regulate cities and their transport systems. But this would raise significant governance challenges and highlight - in fact - the limits of the current nation-state based approach to sustainable urban transport and to sustainability in general. Indeed, all cities, and especially big cities, enjoy a certain autonomy and degree of power. Nation-states are often reluctant regulate cities due to the fact that the national political constructs date from a pre-urbanization period, when the countryside had more power than the urban areas. This governance challenge is further exacerbated in the federalist countries. Consequently, it is almost unimaginable that the Commission would take a country to court over the non-implementation of some regulations by any of its cities.

But cities themselves are not necessarily the relevant governance entity either, be it to implement sustainable urban transport or urban policies more generally. Indeed, in most cases the administrative boundaries of a city do not match its demographic boundaries. Different local municipalities, which together make up a city agglomeration, have diverging views

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REFLECTIONS UPON URBAN ROAD PRICING SCHEMES

The damaging consequences of congestion are visible on economy, environment, public health and quality of life, the pillars of the sustainable development. Actions against this situation require shifting the current modal split in favour of alternatives other than private car. Mobility policies internalizing part of the external costs caused by the use of the private car move in this direction. Within this general framework, a pricing based strategy is a promising solution to control and restrict road traffic.

According to some authors, the overarching object of an access restriction scheme is to reduce pollution, whilst other argue that it is all on tackle congestion. Certainly, the name of the strategy speaks for itself: Congestion Charging in London, Ecopass in Milan, etc. It depends on the needs of the city to assess the real nature of the tax (or, at least, to label the measure!).

So, environmental or traffic improvement? Both sides of the coin since, be that as it may, apart from the different impacts on economy, all the cities have experienced a certain reduction of entering traffic -although this clearly depends upon the fares and the traffic management strategies.

Regarding the analysis and the benchmarking of traffic charging experiences, the main future challenge seems to be to achieve as much as possible consolidated relationships between key indicators, useful to forecast and evaluate, from different points of view, potential new applications for urban road pricing schemes. In this framework some results were conveniently shown by Prof. May during the Forum, but other attempts in this direction have been recently published.

Some questions remain, however, uncertain: is parking policy more cost-effective than congestion charging schemes, as Prof. May remarked? And that is the point: such a measure, isolated, is unlikely to succeed. To set an example, without other changes such as parking restrictions outside the charging area, the effectiveness of the measure may be constrained.

of what sustainable urban transport should be and uneven economic means to implement it. Thus, the importance at the urban level of participatory approaches, as to create more integrated SUMP and urban development plans in general. Ideally, cities should manage to set up a joint urban (agglomeration) transport authority which then can implement a harmonized approach, especially in the case of tendering of urban public transport and perhaps even road charging.

This leaves us with the last, but not least, actor who could make sustainable urban public transport happen, namely the public transport operator itself. Indeed, this public urban transport operator would be ideally positioned to do so: it knows its customers and the corresponding demand much better than anyone else and is also the most flexible of all the urban actors when it comes to responding to their transport needs. But the urban public transport operator often also has problems, stemming from a lack of funding, unclear political guidance (see above) and resulting fragmented and incoherent approaches to urban public transport.

In a nutshell, sustainable urban mobility constitutes a significant governance challenge combining all levels and involving many actors, from the public transport operators, via transport authorities, city governments, nation-states all the way up to the European Commission. And such a governance challenge is not limited to urban transport. It can and will be found in all other urban infrastructure issues (e.g., energy, water, waste). Yet, it is important to tackle this urban governance challenge considering in particular the fact that cities already are, and increasingly will be, determining the future of economic, social and environmental sustainability.

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MULTI LEVEL GOVERNANCE FRAMEWORK FOR SUSTAINABLE URBAN MOBILITY

Cities constitute the backbone of European historic development and provide the basis of its economic future. The near neglect of cities in existing European policies for sustainable growth and development such as the Europe 2020 strategy is untenable. The 2011 White Paper has sought to face this challenge in the transport area, but what should really be the role of the EU? Pioneering cities have undertaken successful initiatives without common regulations, but more attention is needed on the great majority of other cities where little positive change is reported. It is clear that comprehensive sustainable urban development will not occur by itself but will require regulations.

The White Paper defined rather narrow urban goals - to reduce and eliminate the use of 'conventionally fuelled vehicles' and to obtain near- CO2 free city logistics. There is a need to formulate a broader set of desired outcomes for urban transport that cities and citizens can identify with, and which can easily be monitored. It must be hoped that the Commission's upcoming Urban Mobility Package will not only provide a clearer definition of the existing urban transport goal but also help widen and balance the scope to help cities implement comprehensive, ambitious Sustainable Urban Mobility Plans. A crucial point is the need to pay more attention to the political aspects of urban mobility. Game changing results can hardly be obtained by better planning procedures alone. Courage and will on the side of policy makers seem essential to move cities beyond business as usual. Research-wise we need to understand in more detail the political and contextual background for successes - and failures - of European cities. This could help build an effective multi level governance framework for sustainable urban mobility that moves beyond narrow targets, individual solutions, and technical planning procedures.

Read more on the 4th European Urban Transport Regulation Forum on
["Sustainable Urban Mobility: A Case for Regulation?"](#)



NEWS ON URBAN TRANSPORT

[DEPLOYMENT OF ALTERNATIVE FUELS INFRASTRUCTURE](#)

The TRAN Committee of the European Parliament advanced its discussions on the European Commission's proposal for a "Clean Power for Transport" package, which aims at facilitating the development of a single market for alternative fuels for transport in Europe and reducing EU dependence on oil and pollutants. On September 16th the rapporteur, Carlo Fidanza, presented his draft report on the deployment of alternative fuel infrastructure. Both the MEPs and the European Commission stressed the importance of the development and the implementation of national policy frameworks as well as the need for a complementary coherent strategy to deploy alternative fuels infrastructures. On the other hand, major concerns that have been expressed are related to the determination of the mandatory targets, the financial aspects (costs and sources), as well as timing (intermediate targets and mandatory dates to be met). The Committee's vote is due to November.

[EUROPEAN MOBILITY WEEK](#)

About 2,000 cities participated in this year's European Mobility Week. The theme, "Clean air – It's your move!", invited citizens to rethink their daily mobility patterns to contribute to better air quality in urban areas. Given that urban traffic is a growing source of air pollution, local authorities have the responsibility to develop urban transport strategies that meet mobility demand, protect the environment, improve air quality and make the city a better place to live. Indeed, European Mobility Week underlined that only joint efforts from authorities and citizens could bring to change that can significantly enhance the quality of life in European town and cities.

[COMMISSION SIGNS €4 MILLION GRANT FOR SUSTAINABLE URBAN MOBILITY](#)

On 30th September the European Commission signed "Civitas Capital", a grant agreement worth €4 million with a consortium of 14 European research institutes, associations and consulting companies for a three-year project.

"**Civitas** is one of the most important EU initiatives in the field of sustainable urban mobility, it will deliver tangible results" stated by the Vice-President Siim Kallas. The grant will mainly cover the usage: knowledge share, issue recommendations on future R&D

priorities, develop training packages and organise placement, support the transfer of measures to other cities, create five additional networks and continue to manage the existing five, and develop a knowledge centre where all material produced for and by Civitas will be available to public for learning and reapplication.

[SOLUTIONS PROJECT](#)

A new FP7 project on "Sharing Opportunities for Low Carbon Urban Transportation" (SOLUTIONS) will start on autumn 2013. This platform will bring 'leading cities', 'take-up cities' and 'training cities' from Europe, Asia and Latin America together to foster knowledge exchange and boost the uptake of innovative sustainable urban mobility solutions. Areas of attention will be: public transport, transport infrastructure, city logistics, integrated planning / sustainable urban mobility plans, network and mobility management, and clean vehicles.

[DO THE RIGHT MIX](#)

The application for the 2013 EU SUMP award, granted by DG MOVE, was launched in early September. This year's focus will lie on the "integration of economic, social, and environmental policy criteria".

Furthermore, 18 cities have been awarded for their campaigns promoting sustainable urban mobility. The promotion campaigns' objective is to promote with non-technological actions the advantages of combining different modes of transportation. The winning concepts range from car-pooling for travel to work and school, to promoting cycling, and to internships at transport operators.



FURTHER READINGS ON URBAN TRANSPORT

Gudmundsson, H., Ericsson, E., Tight, M., Lawler, M., Envall, P., Figueroa, M.J., and K. Evanth, (2012), "THE ROLE OF DECISION SUPPORT IN THE IMPLEMENTATION OF SUSTAINABLE TRANSPORT PLANS", *European Planning Studies*, 20:2, 171-191 ([LINK](#))

Improved decision support is deemed essential for the planning and implementation of sustainable transport solutions, but limited evidence exists that decision-relevant information is effectively used for these purposes. This paper examines to what extent various kinds of decision support are used and have become influential in three different planning situations—a local cycle plan in Copenhagen, the Stockholm congestion charging trial and the UK national transport strategy. The results reveal the extensive use of decision support but also the difficulty of unpicking its exact role in each case.

Klementsitz, R., Stark, J., and G. Sammer, (2007), "INTEGRATING MOBILITY MANAGEMENT IN LAND DEVELOPMENT PLANNING WITH OFF-STREET PARKING REGULATIONS", *Journal of Urban Planning and Development*, 133:2, 107-113 ([LINK](#))

Parking policy is widely seen today as a proper tool for influencing mobility behaviour in urban and rural areas. The implementation of such measures is a business in urban areas and is both expected and accepted by travellers entering cities in private cars. But what about privately owned off-street parking space? Attractive car parks supplying sufficient capacity free of charge are generating considerable private car traffic because of shopping, leisure, or commuter trips. To avoid these effects, regulations have to be integrated at an early stage of land development. To discuss possible ways to implement such tools in Vienna, a study based on semistructured in-depth interviews with experts in about 30 European conurbations on best practices and transferability was commissioned

McCormic, K., Bomb, C., and E. Deurwaarder, (2012), "GOVERNANCE OF BIOFUELS FOR TRANSPORT IN EUROPE: LESSONS FROM SWEDEN AND THE UK". *Biofuels*, 3:3, 293-305 ([LINK](#))

Biofuels for transport are attracting considerable support from the EU. However, the complexity of the biofuels industry and the diversity of actors create significant challenges for policymaking and governance. This article explores the role of governance in the development of the biofuels industry in Europe, focusing on Sweden and the UK. The purpose of this article is to investigate the similarities and differences of governance activities in these countries and to identify lessons for policymakers on how to establish and expand sustainable and competitive biofuels for transport.

Lopez-Lambas, M.-E., Corazza, M.V., Monzon, A., and A. Musso, (2010), "URBAN MOBILITY PLANS THROUGHOUT EUROPE: A DEFINITIVE CHALLENGE TOWARDS SUSTAINABILITY." *Transportation Research Board 89th Annual Meeting*. Washington DC, 2010 ([LINK](#))

In Europe, regulatory tools such as local Mobility Plans or Urban Traffic Plans have been enforced for a long time. Focused on how to discourage the use of private cars and promote transit and non-motorized modes, these plans have been evolved into the so-called Sustainable Urban Transport Plans (SUTPs), plans that merge urban planning, mobility governance, social awareness and environmental safeguards to develop a vision based on sustainability and equity. Indeed, SUTPs are namely aimed at reversing chronic trends in current land use according to a common regulatory framework. This paper describes how SUTPs are articulated across Europe according to four case studies, which serve as cases in point to highlight variations and

commonalities, both among the four national legal frameworks and the actual planning processes at the local level. Moreover, for each case study, objectives, measures and indicators used in the monitoring and evaluation phases have been analysed and results assessed. Conclusions have been drawn on how to overcome some recurring barriers, and remarks have been prepared regarding the difficulties of transferring good urban mobility policies when dealing with different methodologies.

Lopez Lambas, M.E. and S. Ricci, (2012), "IMPLEMENTATION AND MANAGEMENT OF PRIVATE TRAFFIC LIMITATION IN URBAN AREAS: EXPERIENCES AND METHODOLOGIES", *Urban Transport WIT Library*, XVII, 493-502

In this paper, the problem of sustainable urban mobility has been theoretically set up in terms of transport economy, introducing the external costs' concept duly translated into the principle of pricing for the use of public infrastructures. The research is based on the definition of a set of direct and indirect indicators (to qualify the urban areas by land use, mobility, environmental and economic conditions), which have been calculated for a selected set of typical urban areas in Europe on the basis of the results of a survey carried out by means of a specific questionnaire.

Once the most typical and interesting applications of the road pricing concept in cities such as London (Congestion Charging), Milan (Ecopass), Stockholm (Congestion Tax) and Rome (ZTL) were identified, a large benchmarking exercise and the cross analysis of direct and indirect indicators has allowed to define a simple general model, guidelines and key requirements for the implementation of a pricing scheme based traffic restriction in a generic urban area. The model has been finally applied to the design of a road pricing scheme for a particular area in Madrid.

Sumalee, A., May, A.D., and S.P. Shepherd, (2005), "COMPARISON OF JUDGMENTAL AND OPTIMAL ROAD PRICING CORDONS", *Transport Policy*, 12, 384-39 ([LINK](#))

The performance of cordon pricing schemes is critically dependent on the location chosen for the cordon and the toll imposed. Most cordon designs have been based on professional judgment, in the absence of guidance on the principles of efficient design. In this paper, a methodology based on Genetic Algorithms has been developed to identify the optimal location and toll level for one or more cordons, for a given objective function, with or without constraints on the design or required outcomes. The optimal single cordon achieves welfare benefits which are double those of the best judgmentally designed cordon. Constrained optima inevitably achieve lower benefits, but it is possible to design them so that this loss is minimised.